

The Excavation in the Monastery of Apa Shenute (Dayr Anba Shinuda) at Suhag

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With an Appendix on Documentary Photography at the Monasteries of Anba Shinuda and Anba Bishoi, Suhag

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The Egyptian Supreme Council of Antiquities (SCA)¹ has been excavating in the region of Dayr Anba Shinuda (the monastery of St. Shenute, often called the “White Monastery”) at Suhag since 1985. During this period a number of monastic buildings were unearthed west of the present monastic church (Fig. A). Some of the structures can be interpreted as refectories, monastic dwellings, and mill facilities. Additional buildings include kitchen facilities, a well, and a toilet complex. The general arrangement of the monastery as currently exposed includes the main church in the southeast, a broad street running north-south between the west end of the church and a series of facilities for the community, and a large structure with a paved court to the northwest.

These buildings were excavated under the field direction of Mohamed Abdal-Rassul, who also produced a general survey plan of the area; inspectors Ala ad-Din, Ali Saghloul, and Saad

Usman participated as assistants in the work. Peter Grossmann, with the assistance of Mahmud Abdal-Mugdi Abdal-Hamid, mapped a number of buildings unearthed in the spring of 1989, 1990, and 21 to 27 April 2002. The following is a preliminary report of the site as it presently exists after three seasons of work and a detailed discussion of a select number of the more prominent structures.

THE GENERAL LAYOUT OF THE MONASTERY

The monastery of Anba Shinuda is situated west of the modern town of Suhag, at the margin of the western desert and a few meters above the cultivated area. Like all coenobitic monasteries in Egypt, it was surrounded by an enclosure wall made of crude mud bricks. Sections of the wall were excavated in the southeastern corner of the excavation area.² The enclosure wall was not very sturdy and shows evidence of frequent repairs and reconstructions, demonstrated by the presence of several

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¹ The former Egyptian Antiquities Organization.

² Their position differs strikingly from the walls, which were discovered about a century ago by W. M. Flinders Petrie, *Athribis*, British School of Archaeology in Egypt 14 (London, 1908), 13–15, pl. 43, reprinted with some recent excavation results in *The Coptic Encyclopedia*, ed. A. S. Atiya 3 (New York, 1991): 766–69.

reinforcements on either side of the wall. The innermost wall is furnished with a number of inner buttresses. The masonry itself is of an inferior quality. Small bricks were used and were laid according to the so-called Coptic masonry method in which the headers are arranged in rows on edge, a bonding method which A. J. Spencer calls “edger-headers.”³ The construction process is efficient, but this technique has the disadvantage that the vertical joints are too close for a correct bonding of the structure, thereby undermining the strength of the wall and resulting in the need for frequent repairs and additional supports. On the eastern side of the monastery, however, no remains of the enclosure wall have been found, nor should they be expected. This eastern perimeter wall would have been located along the slope where the desert meets the lower cultivated areas, and has surely been long since lost to agricultural activity. The original extensions of the monastery to the north and south are still unknown and may be discovered with further excavation.

The famous church of Anba Shinuda is the most complete of the standing structures of the monastery and for the past two years has been restored to use by the monastic community (Fig. 1). Located in the southeast quadrant of the site, the church is surrounded by structures to the south, west, and north. Any occupation east of the church was likely removed when the modern road was built and by the cultivated fields beyond. The arrangement of buildings directly around the church is still not clear. The church possesses a number of doors on its northern, western, and southern sides, which means that it was accessible on all sides and no buildings were constructed against its walls. However, we do not know whether there existed only a narrow passageway around the church or a wider alley or street that currently gives access to a series of monastic buildings we are examining.

Directly south of the church is a building with several cruciform pillars. Of particular interest is the discovery of an earlier structure with nu-

merous toilet seats that may have served the community of the monastery. To the west of the church is situated the peristyle hall, which could have functioned as a refectory. It is the only building that has the same axis as the church.

Continuing to the west, another street runs north-south and seems to be one of the main axes of the monastery.⁴ Beyond this street is a prominent collection of buildings around a large, open-air courtyard. It is paved with fired bricks set on edge and covered with a thick layer of *opus signinum*. Remains of this pavement survive only on the western side of the square. The southern side of the square is delimited by a single narrow wall, which does not extend the whole length of this side. Excavation on the remaining three sides of this area illustrates that this was the center of monastic life with dwellings, water storage facilities, and clearly-designated areas for the daily activities of the monastery. The buildings to the east include installations for a mill, a washing area, a kitchen, and possibly a second refectory. Several large granite vessels were placed in this area and a number of not yet identified smaller installations. However, collectively these rooms and structures indicate that the area served as the heart of the daily activities of the monastery for cooking, storage, and cleaning.

A large building with a number of long, narrow rooms is located on the western side of this square; the masonry is of a superior quality, making this one of the more prominent buildings within the enclosure walls. This structure was originally interpreted as a house for the accommodation of the monks, although some unusual features also raise the question of whether the building was used as a granary at some point in the monastery's history.

To the north of the paved square the remains of a strong wall are visible. It once had a monumental door, roughly in the middle, as indicated by a series of steps in front of it. The rest of the building is missing. At a short distance

³ A. J. Spencer, *Brick Architecture in Ancient Egypt* (Warminster, 1979), 7, 136ff, type C, pl. 11, C1 and C2; following the earlier classification of Myers in R. Mond and O. H. Myers, *The Bucheum*, Egypt Exploration Society Memoir 41 (London, 1934), 1: 47ff and 3: pl. 112, W1c and W1cl.

⁴ It is interesting that also the small monastery in the area of the temple of Nektanebo II (360–343 B.C.) in North Saqqara has such a street in front of the church complex; see W. B. Emery, “Preliminary Report on the Excavations at North Saqqâra, 1968,” *JEA* 55 (1969): 31–35, esp. 34, pl. 9, 1 and 11; idem, “Preliminary Report on the Excavations at North Saqqâra, 1969,” *JEA* 56 (1970): 5–11, esp. 5, pl. 2.

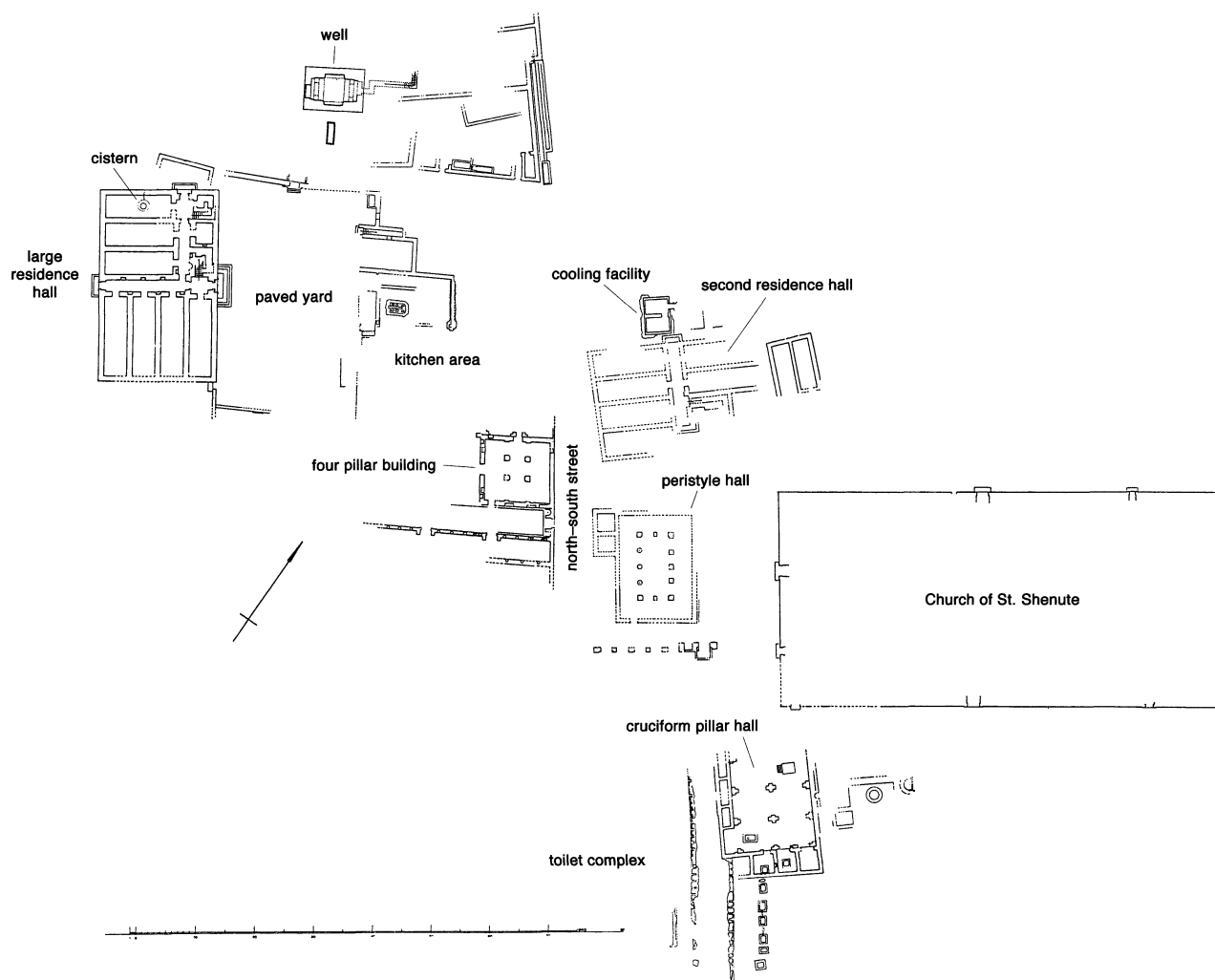


Fig. A Monastery of Anba Shinuda, general plan

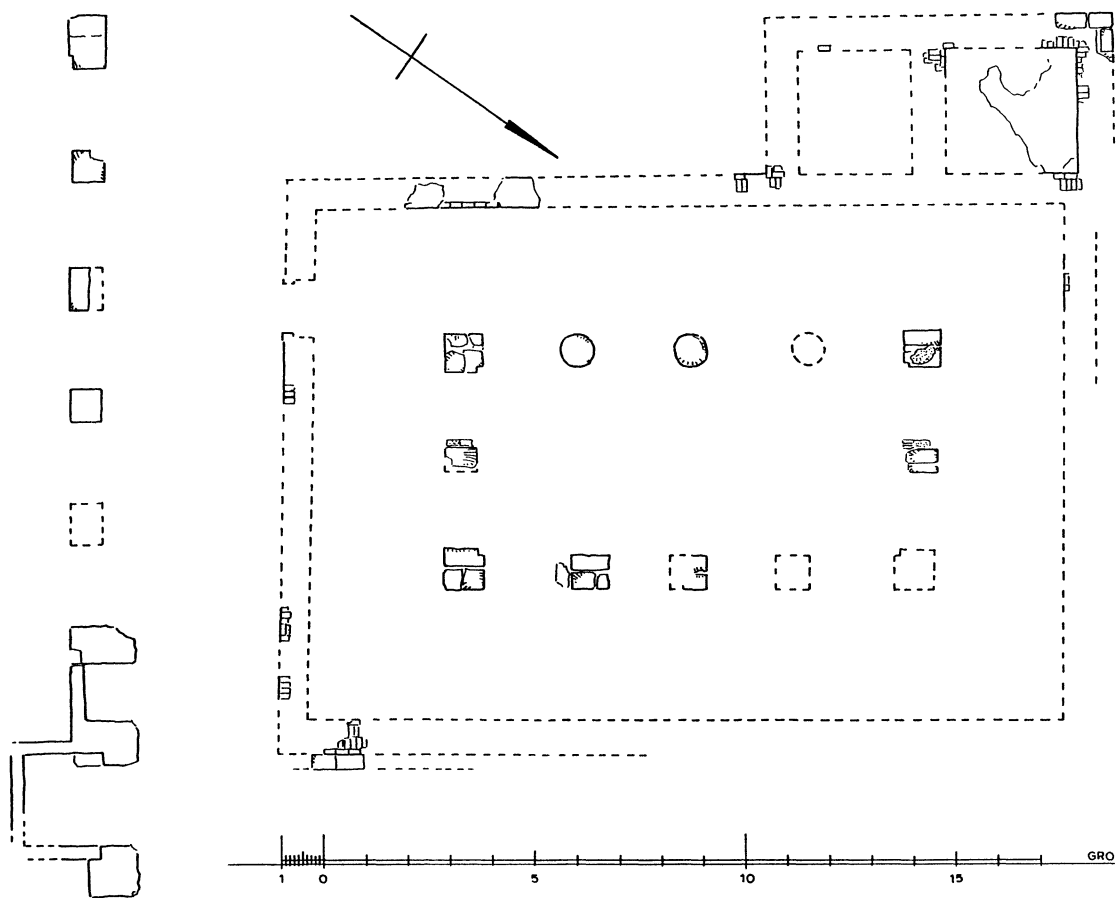


Fig. B Peristyle building

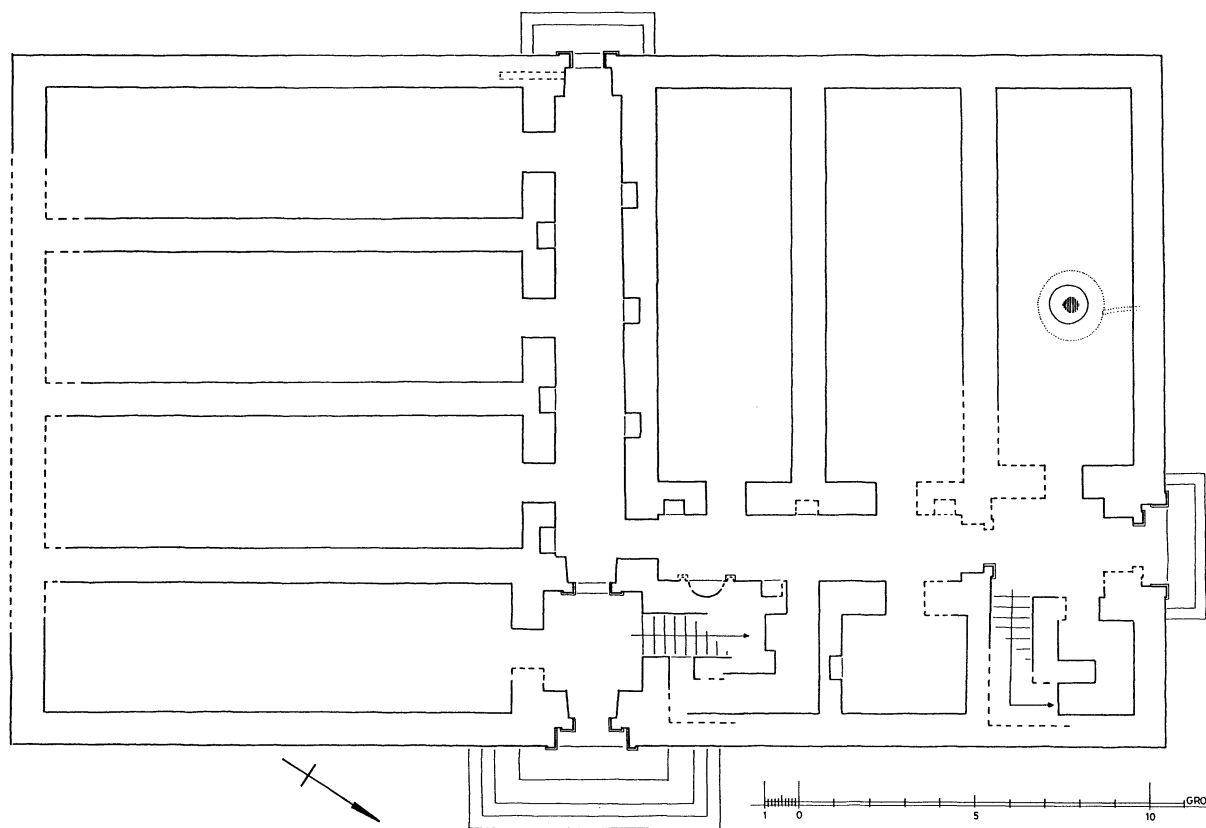


Fig. C Large residence hall

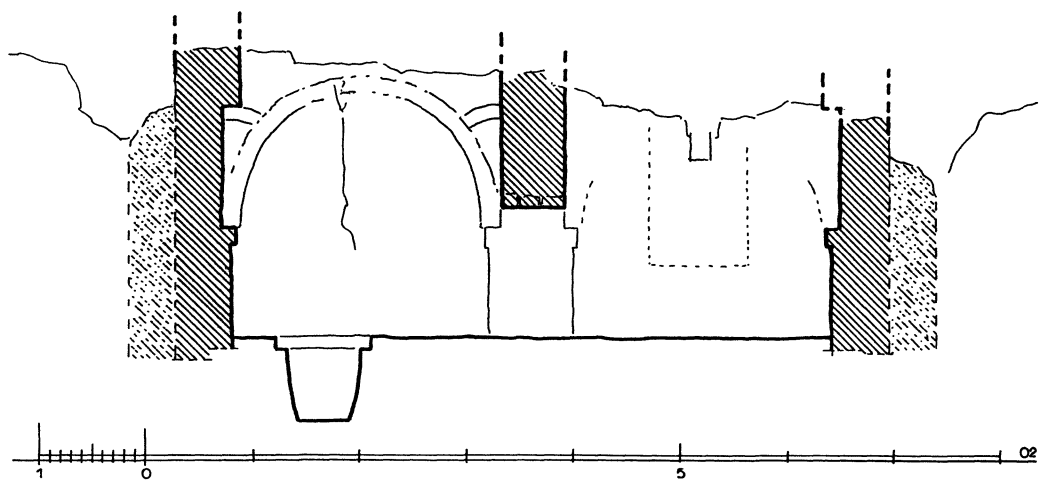


Fig. D Cooling facility

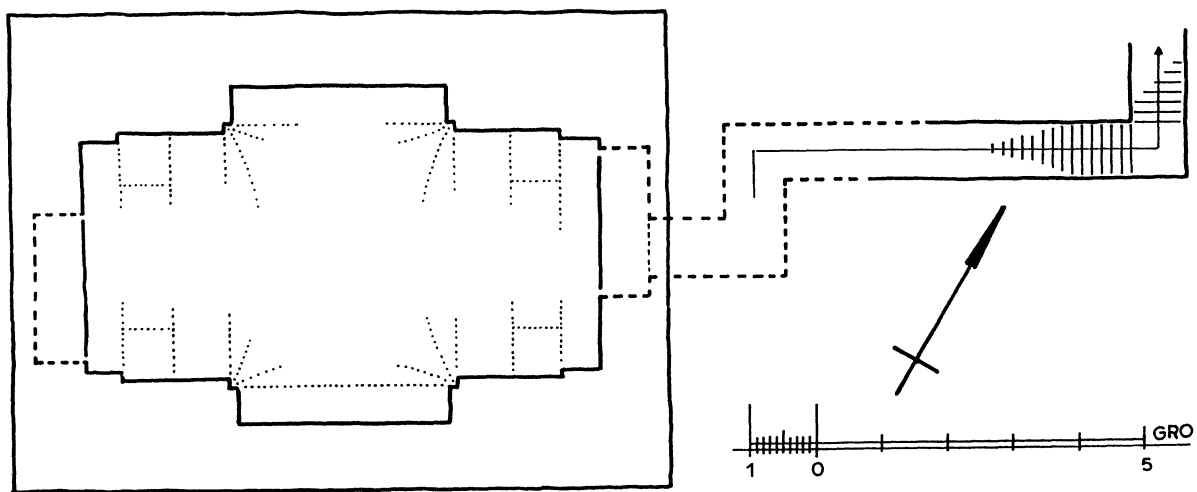
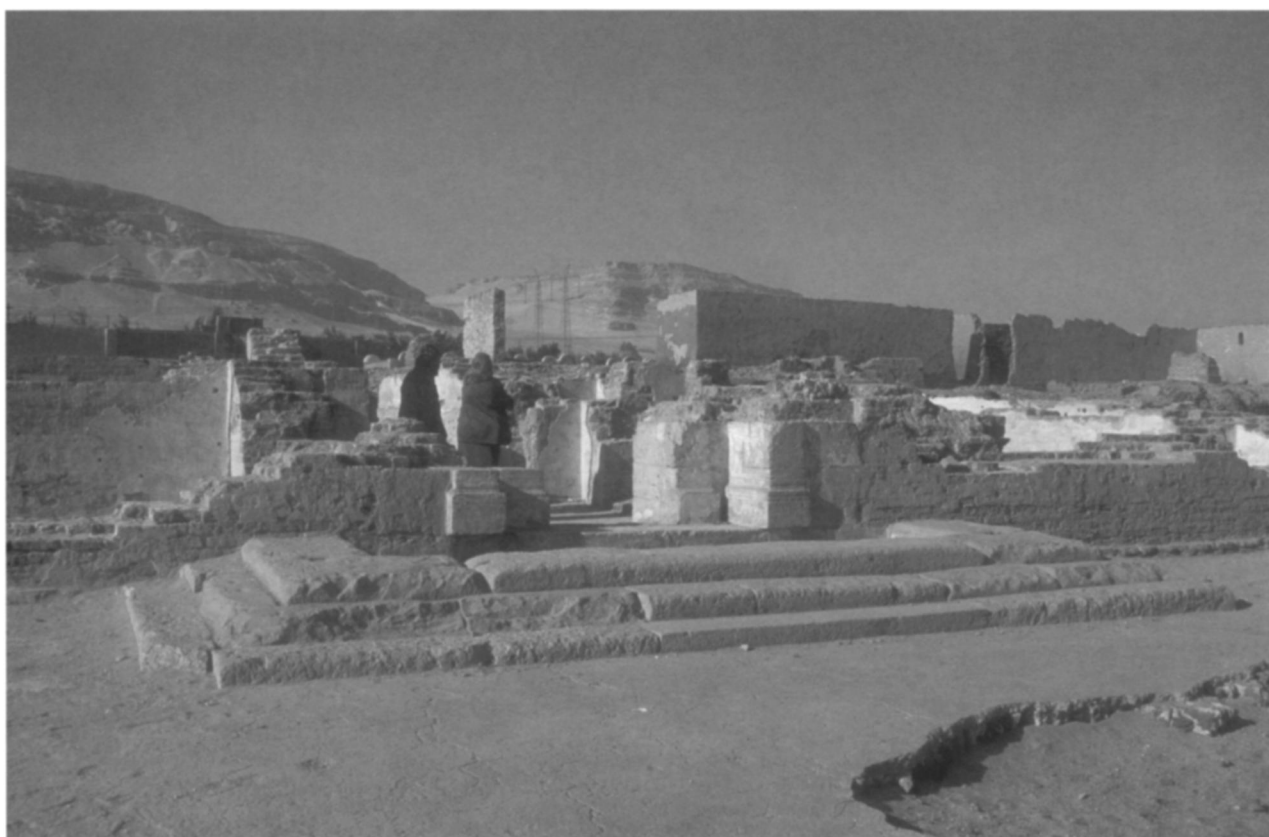


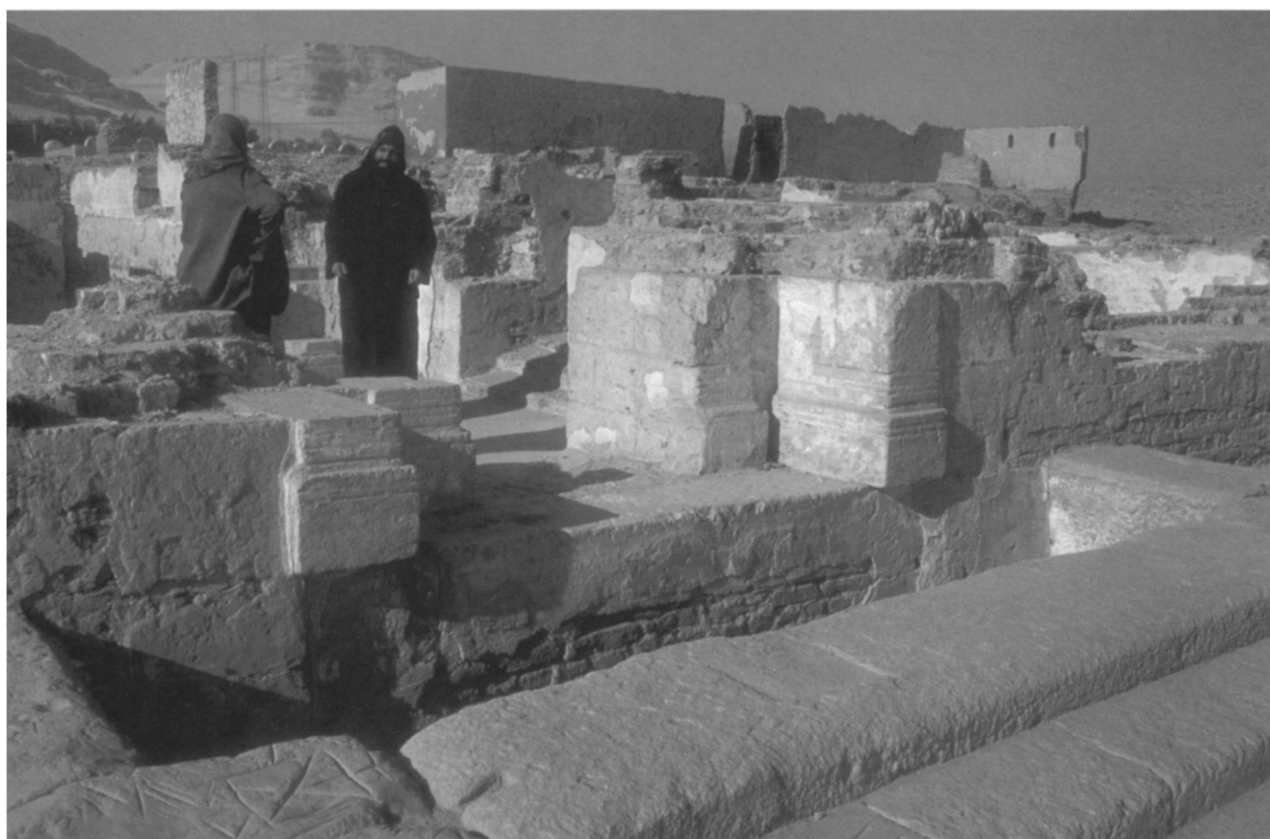
Fig. E Well



1 Monastery of Anba Shinuda, excavated buildings west of the church, including the four-pillared building



2 Large residence hall on west side of paved square, eastern entrance



3 Eastern entrance to the large residence hall with trench (looking northwest)



4 Cistern in northern room of large residence hall



5 Water distribution system visible on surface of the site



6 Exterior of the White Monastery Church, south side



7 White Monastery Church, nave and so-called south narthex, showing (at back left) the wall constructed in the Fatimid period between the nave and the sanctuary, general view



8 Red Monastery Church (Anba Bishoi), nave, showing 20th-century wall constructed between the nave and the sanctuary



9 Red Monastery Church, nave, north inner wall



10 White Monastery Church, eastern end of so-called south narthex, detail to the left of the opening to the cafeteria (i.e., the former library in the southeastern corner of the church)



11 White Monastery Church, sculpted niche head showing grapevines, same general area as above



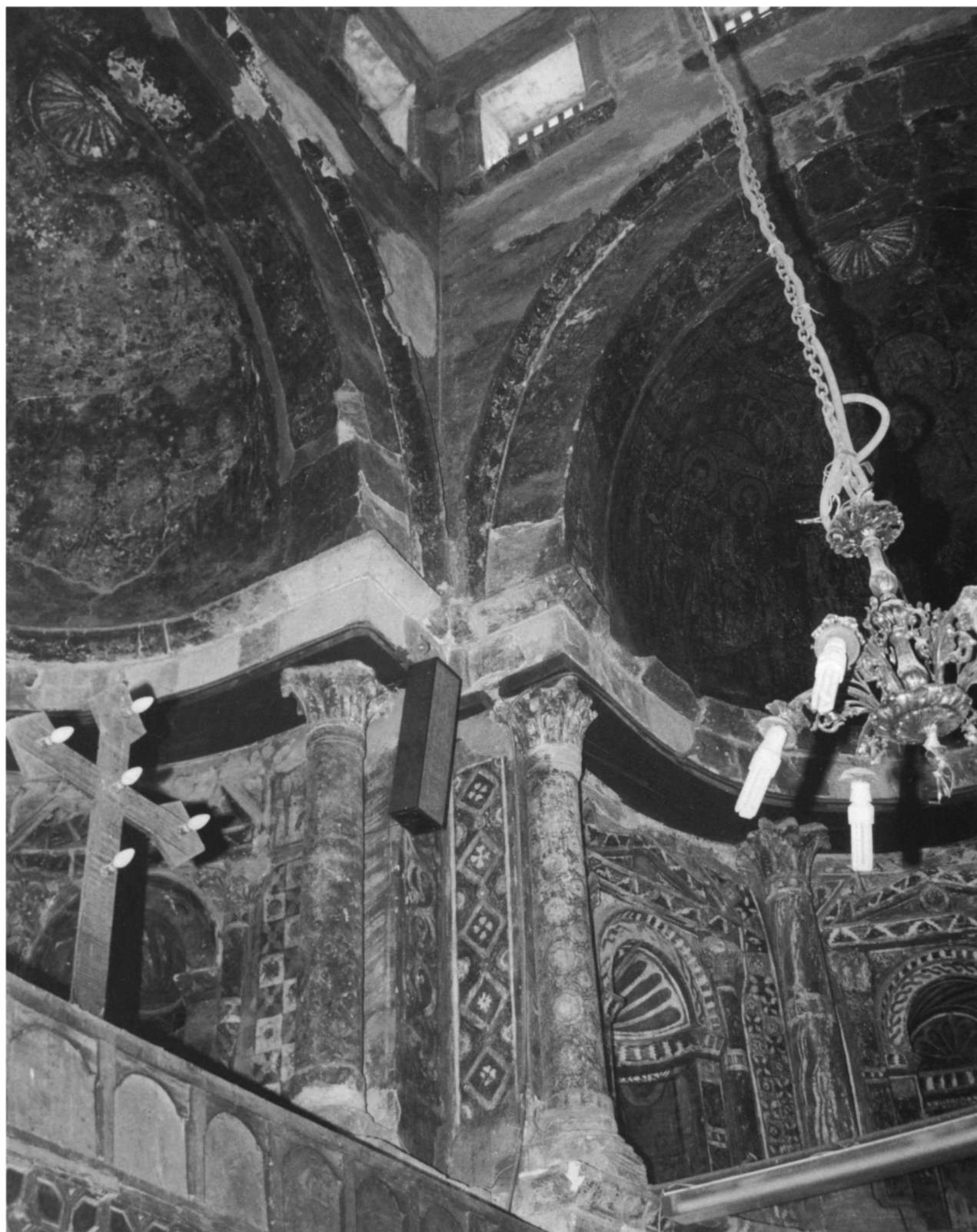
12 White Monastery Church, narthex, interior eastern wall with niches, general view



13 Red Monastery Church, sanctuary (currently functioning as part of the congregational space), detail of a capital



14 Red Monastery Church sanctuary, south conch semi-dome and view of the clerestory



15 Red Monastery Church sanctuary, view of the intersection between the east and south conches, the clerestory above, and the upper register of the *haikal* (sanctuary) screen at the bottom left



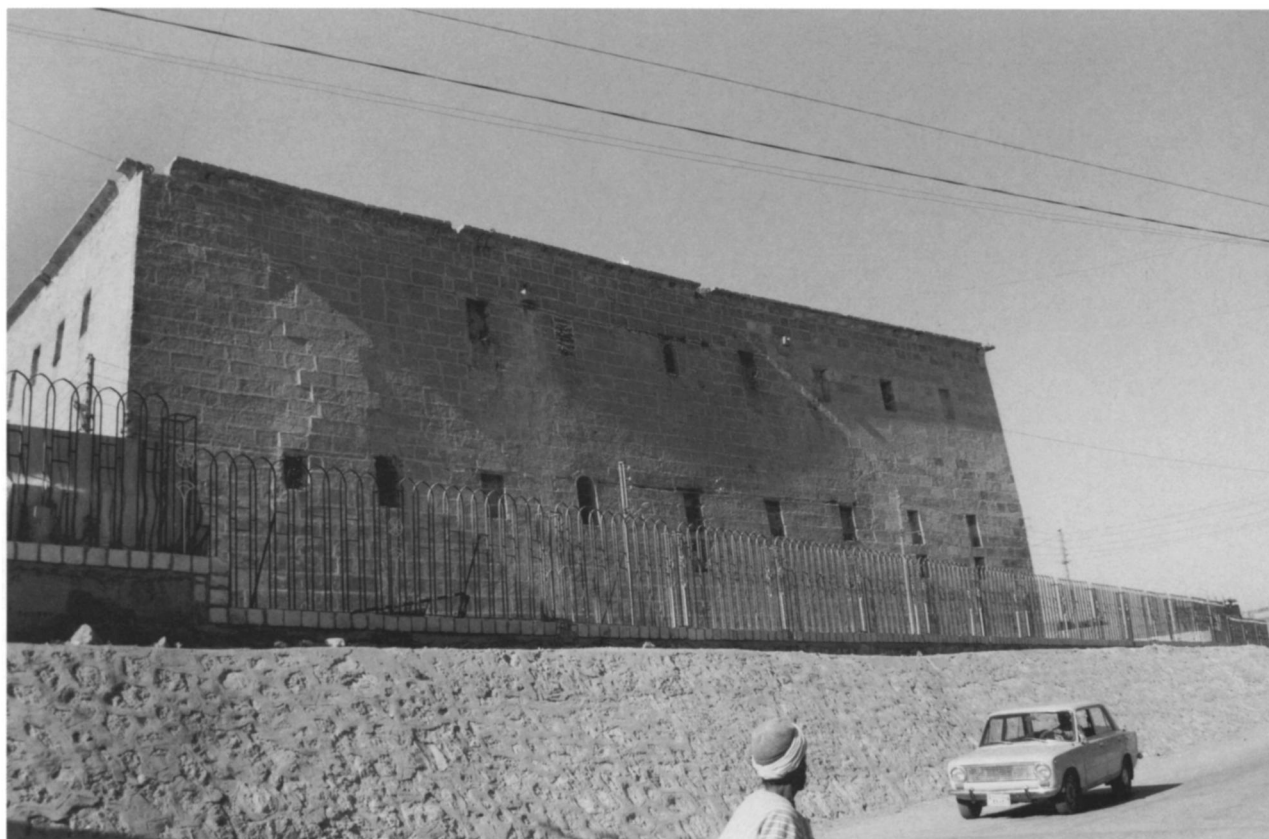
16 Red Monastery Church sanctuary, south conch, with the *haikal* screen and curtain at the left



17 Red Monastery Church sanctuary, north conch, detail of painted niche, lower zone



18 Red Monastery Church sanctuary, south conch, detail of painted niche, upper zone



19 White Monastery Church, exterior, east end, showing the current road level. The road is well below the ground level that still includes existing archaeological remains.



20 Monumental entranceway to the White Monastery site, built in about 2000–2002, looking east. The White Monastery Church is a very short distance to the northwest of the gate.

behind this wall is a substantial water storage facility with a deep, strongly built well constructed of fired bricks. Additional structures to the east are connected with the distribution of water to other monastic buildings.

THE PERISTYLE BUILDING

One of the most interesting buildings unearthed by the SCA is a rectangular complex, oriented roughly parallel to the western side of the church. It is the only building that corresponds in its position and axis to the position of the church. Its interior contains a number of pillars circumscribing a rectangular space, which probably had a high roof and windows in the upper region above the pillars, forming a clerestory to add light to the interior (Fig. B). Unfortunately this building is poorly preserved due to its close proximity to the church and its easy access for stone robbers. Only the foundations of the pillars were found, and in some cases we recovered the lowest part of a few pillars just above the floor level. The pillars in the corners were L-shaped; others were square. Two, or possibly three, pillars on the west side were rounded and are still standing. The significance of these two (or three) rounded pillars is not clear. The construction materials include limestone blocks (apparently *spolia* from Pharaonic buildings) mixed occasionally with fired bricks. The floor of the building consists of a carefully set limestone pavement. The arrangement of the slabs is, however, irregular, containing both large and small slabs. The building was apparently heavily used and was repaired regularly.

Only a very few traces of the outer walls of the building could be identified. The exterior wall was built with fired bricks bonded with mud mortar. On the southern side, at a position not on the central axis of the building, we traced the outer post of a door. A sequence of rooms was added on the western side, and the northernmost room extends slightly further than the northern wall of the peristyle building.

The building apparently functioned as a refectory of the monastery, although it seems rather small for this purpose. The positioning of the building to the west of the church, a traditional location in Egyptian monasteries, as one can observe in several monasteries at Wadi

Natrun (ancient Sketis),⁵ supports this identification, as well as the spatial arrangement of the building with rather spacious aisles and the lack of a larger number of lateral rooms.⁶ Traces of circular sitting rings for use during the meals, such as are found in other early monasteries in the Nile Valley, are, however, not in evidence.⁷ Apparently the monks sat on the floor during meals.

About 4 m south of the building is a series of large standing pillars.⁸ These are apparently not related to the peristyle building because their intercolumniation is very different. The last pillar at the western end is L-shaped which might indicate a continuation to the south; however, whether this was really the case was not further examined. All of the pillars are built of fired bricks, with the occasional insertion of

⁵ H. G. E. White, *The Monasteries of the Wâdi 'n Natrân*, vol. 3. *The Architecture and Archaeology* (New York, 1933; repr. 1973), 24f.

⁶ A similar peristyle building was discovered at the monastery of Apa Jeremias at Saqqara. The building was a short distance south of the Main Church and was erroneously understood by J. E. Quibell as another church (no. 1952 on the plan); see J. E. Quibell, *Excavations at Saqqara (1908–9, 1909–10)* (Cairo, 1907–13). For an introduction to the monastery of Apa Jeremias see *Saqqara IV* (Cairo, 1912), 9, pl. 1, and P. Grossmann, "Reinigungsarbeiten im Jeremiaskloster bei Saqqara, 3. vorl. Bericht," *MDAIK* 36 (1980): 193–202, esp. 198ff, fig. 4. During a later period the central area was reduced to a square by the insertion of an additional column. Another peristyle building at the monastery is the West Mausoleum (no. 1823, the so-called Tomb-Church as it is called by Quibell). It dates before the foundation of the monastery and is the only premonastic building of the site which was not destroyed during the construction of the monastery; cf. Quibell, *Saqqara IV*, 9–12, pl. 17; P. Grossmann, "Saqqara, 3. vorl. Bericht," *MDAIK* 28 (1972): 148ff, fig. 3; idem, *Christliche Architektur in Ägypten*, Handbuch der Orientalistik 1:62 (Leiden, 2002), 342ff, fig. 124. It is sunken into the ground about 3 m and served from the beginning for the service of the dead. It is the 5th-century superstructure of an old, already existing *hypogaeum* and was used by the family of the owners for the celebration of the *silicernia* (memorial meals) for the deceased. The outer northern portico probably formed, as an entrance hall, a part of this building. When the monks took over the site, they turned this building into a tomb hall for the preservation of the bodies of the revered founding generation of the monastery. But it seems doubtful that our building in Suhag served the same purpose.

⁷ *The Coptic Encyclopedia* 7: 2056f, s.v. "refectory"; a good illustration was recently found in the excavation in the temple of Triphis at Atripe where a monastery was installed with a large refectory and several circular sitting benches; cf. Y. el-Masry, "More Recent Excavations at Athribis in Upper Egypt," *MDAIK* 57 (2001): 205–18, esp. 211f, fig. 4.

⁸ Traces of them were always visible; cf. P. Grossmann, "Sohäg," *AfO* 25 (1974–77): 323–25, esp. 323, fig. on p. 324.

a larger limestone block on the lower levels. The pavement between these pillars and the southern side of the peristyle building is similar to the pavement inside the latter and therefore may date to the same period of construction.

THE COMPLEX WITH THE CRUCIFORM PILLARS AND TOILETS

The area opposite the southwestern corner of the church is a rather complex section with several phases and buildings, including a structure with cruciform pillars (Fig. A). The first phase of building was the construction of an irregular sequence of small square and rectangular basins, which were connected by a pipe made of large pottery vessels. The position of the beginning of this pipe is not clear. The basins are rather flat and were built partly of stones and fired bricks. The southernmost basin is considerably deeper than the others and was originally covered with a barrel vault. It is the only example in which the original plaster is well preserved on the walls. These basins require further study to understand their function in this first phase.

To the west of this sequence of basins at a distance of about 4.5 m and roughly parallel to it are two long rows of open-air toilets with at least forty clearly traceable seats. The seats were distributed on both sides of a broad inner passageway running north–south. The whole area is divided into several sections either built in different periods or as the result of subsequent repairs. On both rows only the lower parts of the vertical rectangular shafts are still evident. The shafts are built of brick masonry and end below in a steep slope to the outer side. In one case a little arch has survived, forming the upper end of an outer opening. In the earliest examples the bottom of the slope to the outer side was made of a relatively large irregular limestone block. A wall indicating the widths of the channel for waste is preserved only in a small section behind the western row of seats. No traces of such a wall are preserved on the eastern side. However, this does not mean that it never existed. It might have been lost already in antiquity. There are no traces indicating that any part of the toilet structures was originally roofed. The odors were probably minimal due to the elaborate drainage system at the mon-

astery, and the hot, dry climate of the area would also aid in eliminating odors.

The distances between the shafts are—with a few exceptions—quite regular, varying between 1.00 and 1.10 m, to accommodate one person comfortably. One might thus assume that between the seats some narrow separation walls were erected and may have extended into the area of the passageway for privacy. True sitting niches such as have been found in various residences of Kellia⁹ do not exist in this monastic complex.

In the second phase of building in this area, when the toilet complex was still in use, a larger building was constructed to the east.¹⁰ It seems that for the construction of this building a section of the eastern row of toilet seats may have been removed. The southern wall of this new building was placed directly above the area between the first and second basins to the north. As a result the first basin was covered by a floor and was no longer used. It is clear that the pipe between both basins was destroyed long before the outer wall of the building was erected.

The building proper was probably an open court lined with rooms on the sides. It consisted of a sequence of four rooms in the south. The westernmost room was not accessible from the interior of the building. Likewise, a sequence of very narrow rooms along the western side shows no evidence of having doors. Only the southernmost room had a full-sized opening. The entrance wall of the southern row of rooms was adorned with a number of narrow pilasters with simple bases. One of the capitals survives, nicely decorated with acanthus leaves. The westernmost pilaster was aligned with the axis of the front wall of the western sequence of rooms, and it is not to be excluded that a similar pilaster was originally extant at the opposite

⁹ Cf. B. Boyaval in F. Daumas and A. Guillaumont, eds., *Kellia I. Kom 219. Fouilles exécutées en 1964 et 1965* (Cairo, 1969), fasc. 1, 76, salle XLII, pl. 13; fasc. 2, pl. 17a; a number of well-preserved examples were also found in Kûm 195: cf. N. H. Henein and M. Wuttmann, *Kellia II. L'ermitage copte QR 195*, vol. 1, *Archéologie et architecture*, Text- und Tafelbd. (Cairo, 2000), 196ff, figs. 211ff.

¹⁰ A preliminary survey plan was published in M. A. Mohamed and P. Grossmann, "On the Recently Excavated Monastic Buildings in Dayr Anbâ Shinûda: Archaeological Report," *BSAC* 30 (1991): 53–63, fig. 1, without discussing the building in the text.

corner of the first room. It cannot be determined whether or not some supports, corresponding to the positions of the pilasters, once existed. It is also unclear if supports could carry a ceiling above the area to the north of the southern rooms. No traces of such installations survive. The supports either were completely removed or never existed.

At a much later date, a third phase of construction included the erection of a roof over the open courtyard. To achieve this, a number of pillars were placed inside the courtyard and around the perimeter of the building. The pillars have a variety of forms: cruciform pillars in the center, T-shaped pillars along the walls, and L-shaped ones in the corners. Bays were formed between these pillars and covered with hanging domes which are visible above the impost blocks of the southernmost cruciform pillar.¹¹ Two pillars of this kind are currently visible. M. Abdal-Rassul observed another T-shaped pillar further to the north that indicates the existence of a third cruciform pillar. Along the middle of the southern wall, between the eastern T-shaped pillar and the southeastern corner pillar, another pillar was placed in the form of a flat buttress with a semi-column in the middle. This is likely a later addition and seems to have supported the dome.

A new floor was laid down when the pillars and roof were added. The floor consists of a carefully executed limestone pavement. It is considerably higher than the original floor level, which is poorly preserved. The level of the earliest floor can be ascertained from the position of the pilaster bases at the southern wall and the height of the thresholds of the doors leading into the southern rooms. In the southern regions of this building we recovered stone and ceramic vessels below this early floor, although we did not investigate beyond this level.

Only in the second room from the east do remains of the earlier floor survive. It consists of a regular pavement of limestone with a small, carefully shaped basin in the center. The basin is framed on all four sides with decorative arches, resting on small corner pillars that were

plastered with *opus signinum* and painted red. Small ceramic piping was inserted slightly below the floor in both its northern and southern sides. The northern pipe starts from a small, round ceramic vessel placed in the ground and was used for filling the basin. The other one is situated on a slightly lower level and probably served as an overflow drain, connected with a larger pipe leading to the south out of the building. The drain on the exterior southern wall is marked by a small arch below which the pipe could leave the building. This installation indicates that this structure dates to the first phase of the building. It appears that the basin and the attached pipes remained in position when the later floor was added and they continued to function. Further work is needed to investigate the scope and function of this installation.

The remains to the east of the building are too poorly preserved to understand their function. However, two rooms of an earlier mud-brick building are recognizable. How they relate to the mud-brick walls below the interior floor of the building to the west is not clear. On a higher level a relatively long wall is visible with a central semicircular niche pointing to the west. It was apparently built after the construction of the complex with the cruciform pillars.

Partial remains are visible further to the east and closer to the northern margin of the excavated area. Here we observed a large circular brick structure and slightly to the north of it a thick wall of fired bricks running east to west. A short distance further to the east from the wall we cleared part of another semicircular niche that seems to be significant, although it is pointing to the west. The niche belongs to a structure built of fired bricks and limestone blocks. The southern opening of this niche is framed with a column with an extant granite base. It is likely that on the other side of this niche a similar column could also exist. This area is a priority for subsequent seasons to attempt to determine its function.

THE LARGE BUILDING: A RESIDENCE HALL OR A GRANARY?

An apparently important building was located on the western side of the central square

¹¹ See Grossmann, "Sohâg," 323ff, fig. 11 and fig. on p. 322.

of the monastery (Figs. C and 2).¹² It is the most impressive of the existing buildings found at the site, excluding the church, and occupies the length of the western side of the square. This building probably had two stories, although only the first floor is preserved. It was built entirely of fired bricks, except for the large limestone-block corners and doorjambs of the outer doors that were made with ashlar masonry. The floors are unusually well constructed with three layers of fired bricks, bonded in lime mortar and covered with a floor of concrete. There are three entrances, which were framed with shaped pilasters. The main entrance is situated in the middle of the eastern wall facing the square. A second entrance is on the northern side, and a third one is found on the western side of the building just opposite the main entrance to the east. All entrances are accessible from the exterior by a number of steps. However, at the top of the stairs where a small landing is usually situated we found deep, rectangular depressions or trenches in front of the doors (Fig. 3). The trenches correspond in length roughly with the width of the doors and are about .80 m in depth. The width of the openings between the top step and the door threshold is on average .75 m. The purpose of these trenches was perhaps to keep mice and other vermin out of the building, and, to be more effective, the trenches might also have been filled with water. This method is until now not known from any other place. However, in the monastery of Shenute itself there are a few other examples to be found, for example, at the eastern end of the passageway to the north of the building with the large ceramic vessels (see below) and at the western entrance of the building complex (unpublished) to the north of the second residence hall (see below). In the first example, a monolithic sandstone container was engaged for this purpose and was apparently added at a later period.

The main entrance to the building was from the open courtyard on the east with three major steps. Apparently the western entrance served only secondary purposes and did not have stairs. The framing walls of this rear entrance are well preserved on both sides to a con-

siderable height, and part of the closing mechanism for this door has survived. On the inner left side of the doorjamb is a long, deep borehole into which a thick movable wooden beam could be placed. In case of necessity, this beam could be pulled out of its hole and its frontal end fixed in a small opening on the opposite right side to lock the door from the inside. The northern entrance leads into a separate unit, and its threshold consists of a large Pharaonic *stele* from which the hieroglyphic inscription has been cut out.

The entrances on the north and east have small recessed alcoves that face out. Doors were placed on the opposite side of the alcoves. On the outer side the recess is flanked with pilasters on both sides, above which an arch was probably constructed. They are far too small to be a regular *vestibulum*, but may be understood in their present form as a kind of inverted *prothyron*. The doors have finely decorated doorjambs with doorposts made of limestone and shaped like pilasters whose bases are still *in situ*. Their form roughly follows the profile of an Attic base. Both doors lead at first into a small rectangular entrance hall, which leads to another door that provides access to the interior of the building. Each entrance hall includes a staircase for the upper story. The upper flight of the stair was slightly inserted into the outer wall, as is often the case in Egyptian architecture.¹³ Two long, narrow rooms are situated on the opposite side of each staircase. The one to the west of the northern entrance hall contains a deep circular water cistern below its floor (Fig. 4). On the lower part of the northern exterior wall we traced the remains of a pipe. The cistern's opening is 1.10 m in diameter. To avoid problems at times when the water table was very low, the bottom of the cistern is provided in its center with an additional circular depression of a much smaller diameter. The room south of the main eastern entrance is devoid of any special feature, and only the western and northern walls of the room are preserved.

The two central entrances indicate that the interior of the building was divided into two dif-

¹² Already surveyed in 1990; see Mohamed and Grossmann, "Dayr Anbâ Shinûda," 55ff, fig. 3; see also *Coptic Encyclopedia*, 3: fig. on p. 767.

¹³ See P. Grossmann, "Altägyptische Elemente in der frühchristlichen Baukunst Ägyptens," in H. Guksch and D. Polz, ed., *Stationen. Beiträge zur Kulturgeschichte Ägyptens, Festschrift Rainer Stadelmann* (Mainz, 1998), 443–58, esp. 448f, fig. 1.

ferent sections. The inner doorways of the two entrance halls are also decorated with nicely shaped doorposts and have slightly thinner doorjambs. These doors lead each to an interior corridor through which the inner rooms are accessible. The corridor of the southern section runs east–west and provides entry to three rooms. The northern section runs north–south and provides entrances to two other rooms. Apparently these inner doors closed off the more secular activities in the outer areas from the interior of the building.

The most important area of this building is the section behind the main entrance on the east side of the building. The three long, rectangular rooms are accessed from the east–west hallway. The entrance doors to these spaces are relatively simple. They were furnished only on the entrance side with a wooden threshold, which is indicated by a small recess at the feet of the doorjambs. These wooden thresholds probably also held the door pivots and likely served as the doorstops. The corridor had a number of rectangular wall niches for lamps or small items and ended on the west with a door, less grand than the eastern entranceway.

The northern section of the building appears to be of secondary importance. A door connects the north–south corridor with the main east–west corridor at its southern end. Shortly before this southern end, on its eastern left side, there is a semicircular niche inserted into the wall. As the traces on the sides demonstrate, the niche was apparently flanked on both sides with engaged columns or pilasters. The significance of this niche is not clear. It could not have functioned as a prayer niche because of its location in the main traffic area of the building and the lack of space. Other wall niches, such as in the main corridor, survive in relatively small numbers. But, because the sidewalls are preserved to an insufficient height, it is possible that they did exist at a higher level, just as in the other corridor, but are no longer present. The northern corridor gave access to two long rectangular rooms in the west and a smaller one on its eastern side between the two staircases.

The function of this building is not immediately apparent; however, two interpretations are currently under consideration. In the first report in 1991, we suggested, on the basis of the number of long rectangular rooms, that the

building was a dwelling for housing monks.¹⁴ Other buildings with similar arrangements for monastic accommodations have been found in the neighborhood of Antinoopolis¹⁵ and at al-Balayza.¹⁶ No traces of beds have been found, but the monks probably slept on mats placed directly on the floor.¹⁷ However, other monastic accommodations show a quite different arrangement from what is found here at Dayr Anba Shinuda. Moreover, the strength of the floors, the provision that was made to prevent the entry of mice or other vermin, and the lack of significant graffiti on the walls (in some rooms, walls with intact plaster are well preserved) argue against the interpretation of the building as a dwelling for monks. The lack of inner wall niches in the rooms is also inconsistent with a space in which monks would be expected to pray while in their cells.

A second interpretation we are considering is that the structure was a granary, as proposed recently by P. Grossmann¹⁸ by drawing attention to the proportions of the rooms, since in some other *horrea* the storage rooms proper have exactly the same proportions.¹⁹ However, there are several elements that make this identification less convincing. First, one may consider the architectural form of the building: it has a commanding position on the western side of the large square; there are three entrances, while one would be sufficient for a granary; and the interior lacks the narrow and low transverse

¹⁴ Cf. Mohamed and Grossmann, "Dayr Anbâ Shinûda," 55.

¹⁵ To be published in the near future by Abdal-Rahman Abdal-Tawab in collaboration with P. Grossmann; see previously P. Grossmann, "Die Unterkunftsbauten des Koinobitenklosters 'Dair al-Balayza' im Vergleich mit den Eremitagen der Mönche in Kellia," in *Le site monastique Copte des Kellia. Actes du colloque de Genève 13–15 août 1984* (Geneva, 1986), 33–40, esp. 37, fig. 2.

¹⁶ P. Grossmann, "Ruinen des Klosters Dair al-Balaizâ in Oberägypten. Eine Surveyaufnahme," *JbAC* 36 (1993): 171–205, esp. 190ff, folding pl. 2.

¹⁷ See, e.g., the lodging house discovered by Flinders Petrie north of the temple of Auletes: Flinders Petrie, *Athribis*, 11, pl. 35; on the location of this lodging house, see *ibid.*, pl. 14; on new excavations in the temple proper, where also several remains of an early Christian monastery have been found, see el-Masry, "More Recent Excavations at Athribis in Upper Egypt," 205–18.

¹⁸ Grossmann, *Christliche Architektur in Ägypten*, 293, fig. 154.

¹⁹ Especially noteworthy is the *granarium* of Andriake, the so-called *horrea Hadriani* on the Lycian coast; cf. J. Borchhardt, *Myra. Eine lykische Metropole in antiker und byzantinischer Zeit*, *IstForsch* 30 (Berlin, 1975), 66ff, fig. 14.

walls needed for retaining the grain from the doorways that are usually used in similar cases.²⁰ Second, the size of the building, with its two floors, appears too large for the needs of a monastic granary. Third, and this is the most important factor, the most recent discoveries at the site brought to light a second building of practically the same form. It is similar in size, with long rooms and central passageways paved with regularly sawn limestone slabs. With two practically identical buildings it seems unlikely that both these structures were for storage. The installation of the depressions in front of all the outer doors of the building as a protection against mice and other vermin such as scorpions was equally useful also for the accommodation of the monks, and, last but not least, the same installations were also found at buildings that definitely did not serve as granaries. Therefore, we prefer to return to our earlier identification of the building as a lodging house for the accommodation of the monks with one room furnished with a cistern.

Concerning the date of the building, no material has been found upon which a clear dating could be based. In general terms, it probably does not belong to the time of Shenute, in other words, to the first half and middle of the fifth century, but to a date of some centuries later, to a period after the Arab conquest in A.D. 639/642, when the majority of buildings with fired bricks were constructed. In the early centuries of the monastery only sun-dried mud-brick material was used for buildings, with few exceptions.

²⁰ Such walls are still extant in the granary of the monastery of St. Catherine on Mount Sinai; cf. G. H. Forsyth and K. Weitzmann, *The Monastery of Saint Catherine at Mount Sinai. The Church and Fortress of Justinian* (Ann Arbor, Mich., 1965), 3ff, fig. A.21 (not indicated on the plan), pl. 18a. In larger granaries the storage areas for the grain are also divided into different sections with narrow passageways between them; cf. E. M. Husselman, *Karanis Excavations of the University of Michigan in Egypt 1928–1935. Topography and Architecture* (Ann Arbor, Mich., 1979), 56ff. Smaller granaries in private houses also often have a narrow passageway between the containers of grain; see W. M. Müller-Wiener and P. Grossmann, "Abu Mena, 6. vorläufiger Bericht," *AA* (1967): 457–80, esp. 463ff, fig. 3, Haus 22B and C. In military *horrea* of northern Europe similar walls were made of wood; cf. G. Rickman, *Roman Granaries and Store Buildings* (Cambridge, 1971), 236f, fig. 47.

A SECOND RESIDENCE HALL

The remains of a building whose ground plan has several similarities with the large complex mentioned above is located in the region north of the peristyle building, close to the northwest corner of the church (Fig. A). The building is considerably less well preserved than the larger residence hall by the main square. In many places only some sections of the limestone slab floor survive, and the walls have disappeared. As one can now see, the building could be entered on the north side. This entrance also had a narrow, deep trench in front of the door, and there is reason to assume the existence of a parallel entrance on the south side. The northern door opens into a narrow corridor giving access to a number of symmetrically-arranged long, narrow rooms on both sides of the corridor. There are four rooms traceable on the western side and at least two on the eastern side whose exact length has not been determined. The position of a third room is occupied by a stairway accessible from the central corridor that runs north–south. To the east of the stairs is another smaller room which was apparently accessible from the side corridor of the stairs.

At the southern end of the interior corridor is a trench similar to that outside the northern entrance. The trench is, however, not rectangular, but turns a corner to the north and appears to continue below the wall. This small trench is unique because it is located further inside the building than in other examples. It might then be the case that in front of this depression a kind of *vestibulum* was situated, from which the first two side rooms were directly accessible. This is also seen in the two entrance rooms in the larger residence hall to the west. The obvious parallels between these two buildings make it clear that they served as the place where monastics resided. More investigation is needed to determine the date of these two buildings and their relationship to each other and the history of the monastery.

The walls of an earlier building were found just outside the north door of the smaller residence hall (Fig. D). Of this building only the subterranean structure survives. It consists of two rooms which were accessed from the east side of the northern room. Entry into the rooms

by a slightly curved stairway was limited since the threshold for the door lies about 0.50 m above the floor level. Both rooms were barrel-vaulted and joined together by a low door. The latter had a lintel of wooden beams.

Only a few traces of the vaults are visible on the western wall; however, the sections that are still preserved provide an excellent example of their construction methods. The masons began the vaults with a course of headers set on edge, slightly extending beyond the exterior of the walls. In the upper courses the vault was combined with little shoulder vaults, more commonly known from Nubian mud-brick architecture.²¹ The example here in the monastery at Suhag demonstrates that this method of vault construction was known also in Egypt and probably at an even earlier date.²²

In a later phase a small window with a steep sill was inserted in the west wall of the northern room. The southern room contained a large circular vessel sunken in the floor. The function of this underground building is not fully understood. It may have served as a cool storage facility since all the outer walls are reinforced with a thick outer layer of mud-brick masonry which is well known for its heat-insulating ability.²³ The relationship of this small building to the residence hall is still a topic for further inquiry.

THE WELL WITH THE EASTERN COURT

Some 20 m north of the paved central square the excavators discovered a large, deep well built almost entirely of fired bricks except for a foundation of ashlar masonry directly above bedrock (Fig. A). The well consists of a central square shaft with extensions to the east and west (Fig. E). A flat wooden roof or a hanging dome, for protection against pollution, appar-

ently covered the central shaft,²⁴ and the lateral extensions were barrel-vaulted. In the center of both extensions a narrow strip was open, probably for the installation of a *saqiya*, an Egyptian water-lifting system operating with a wheel that was equipped with ceramic vessels tied to a rope. On the eastern side of the well a fired brick stairway led down to the level of the water. The pathway turns three times and opens just in the middle of the eastern side of the cistern. Only the projecting edges were strengthened with large dressed limestone blocks. The lower part of the eastern side of the well has a large asymmetrical niche whose axis does not directly correspond to the axis of the staircase. A similar asymmetrical niche is placed at the foot of the western extension of the well, but it is not connected to a stairway.

The general construction of the well and the proportions of the central shaft correspond exactly with the central space of the triconch in the great church, except that the dimensions are reduced by half. This unusual coincidence might point to the fact that the builders, or at least the chief engineers, were the same ones who constructed the church and that both structures are more or less contemporary.

South of the well is an area paved with thick granite blocks (Fig. A). The granite blocks surround an oblong basin built of limestone and situated exactly along the transverse axis of the well. This association suggests that the two features are related and possibly built at the same time; however, in order to determine the purpose for the well, further excavation is required in the court that surrounds it. At the moment we suggest that the granite platform and the oblong basin served as a washing place.

A large number of pipes extend from the well, transporting water in several different directions across the site, often interrupted by small rectangular boxes for subsidiary lines. Not all of the pipes were contemporary, and changes to the delivery system are observable all over the surface (Fig. 5). Apparently the pipes that fell out of use were generally not removed but left in place.

²¹ See F. W. Deichmann and P. Grossmann, *Nubische Forschungen*, Archäologische Forschungen 17 (Berlin, 1988), 151ff, figs. 34, 38, 47a. Another example of the use of such shoulder vaults was observed in the cellar of one of the 5th-century houses in Elephantine; cf. F. Arnold in W. Kaiser et al., "Stadt und Tempel von Elephantine," *MDAIK* 55 (1999): 148–58, esp. 149, fig. 26.

²² It apparently never occurred in Pharaonic architecture; cf. Spencer, *Brick Architecture*, 123ff.

²³ Cf. A. Lucas and J. R. Harris, *Ancient Egyptian Materials and Industries*, 4th ed. (London, 1989), 50.

²⁴ For the same reason also the well in the 6th-century army camp of Raithu (South Sinai) was covered by a barrel vault; see Grossmann, *Christliche Architektur in Ägypten*, 360, fig. 188.

There are several mud-brick buildings to the west of the well (they are not indicated on Fig. A). A large court was built to the east; however, only the southern and eastern walls remain visible. The exterior walls are connected with several transverse mud-brick walls defining the position of a number of additional rooms distributed along the walls. Little remains of these rooms except a rather narrow chamber in the southeast corner. Several of these rooms had slender rectangular basins. The walls of earlier mud-brick buildings are visible in the center of the large court, and subsequent seasons will allow us an opportunity to examine the function of these rooms to the north of the main buildings of the monastery.

Beyond the eastern wall is a broad channel of concrete running north–south. It was later modified by the addition of a narrow basin situated just opposite the southeastern corner room of the enclosure of the western well court.

THE FOUR-PILLAR BUILDING AND THE NEIGHBORING STRUCTURES TO THE SOUTH

The four-pillar building²⁵ is located on the west side of the north–south street and opposite the second residence hall and the peristyle building (Figs. A and 1). This square building with four strong and regularly placed pillars is partly integrated into the kitchen complex of the monastery. Entrances are visible on the northern, southern, and western sides. All the walls were constructed of sun-dried mud bricks, although the southern wall shows evidence of numerous repairs with a mixed masonry of sun-dried and fired bricks. The four inner pillars, as well as the corresponding inner buttresses along the two side walls, are of ashlar masonry. Three pillars survive in a relatively good state of preservation to a height of about 1 m above floor level. The fourth pillar is fragmentary, with only the southeastern corner still *in situ*.

All the pillars have a T-shaped ground plan. They are arranged in such a way that the innermost branches outline an inner square space, which, in all probability, was once covered with a central dome. The outer branches point to the north and south side walls and are aligned with

the corresponding buttresses that project from the walls. Obviously both features were once connected by arches, thereby creating a three-aisled structure. Whether these aisles were covered with vaults or some wooden constructions is not detectable.

Strangely enough, the four pillars are not evenly distributed to provide a regular division of the interior space. The area just to the south of the pillars is considerably larger than that to the north. Furthermore, the pillars rest upon the floor, which consists here of regularly sawn slabs of limestone. There is no doubt that these pillars do not belong to the first phase of construction of the building since, according to the general rule of building technique in Egypt, floors were always laid after the walls and other supports were already in place.

A closer examination of the walls of this building indicates that they were also additions in a later phase of building. The walls overlap the same floor on each side by 0.10–0.15 m. By carefully examining the foundation of the side walls it became clear that the first phase of the structure included the limestone pavement and walls made entirely of mud brick. At a later date, for reasons we do not know, this building was dismantled to the level of its floor and then rebuilt in a slightly different way. There are visible sections of the original walls below the floor level, although they are very eroded. The masonry is characteristic of its kind, with a light mortar in the joints between the bricks, caused probably by a considerable percentage of *taft* (a kind of very concentrated argillaceous earth present all over Egypt) and ordinary clay in the mortar. In some instances, fine layers of soil are recognizable in the stratigraphy between the remaining upper surface of the original structure and the beginning of the second phase of masonry.

It is therefore quite possible that in the original building the four inner pillars had a more regular position in relation to the arrangement of the lateral walls. Indeed, all four pillars of this later phase are standing upon foundations of fired bricks laid on edge between the slabs of the pavement. However, these also represent an intermediate stage, since they also do not correspond with the axis of the building. The form of this building, its continued use after minor modifications, and its location lead us to assert that the building apparently served as one of

²⁵ This building was previously surveyed in 1990; see Mohamed and Grossmann, "Dayr Anbâ Shinûda," 54f, fig. 2.

the refectories of the monastery. In its current phase, built of sun-dried and fired bricks, it might belong to a period after the Arab conquest in A.D. 639/642, probably belonging even to the eighth century.

A street or broad passage extends along the south side of the four-pillar building. The pavement of regularly sawn limestone slabs is surrounded on all sides with a continuously running *mastaba* of limestone blocks. At its eastern end is placed a door which apparently gave direct access to the north-south street of the monastery. The two doorposts, probably of stone, are missing. In the space between them lie larger stone fragments which form, when placed together, a rectangular trench or basin similar to the one found at the entrances of the two residence halls to the west and the north. The door is flanked on the interior by two relatively large niches that extend down to the floor. The one to the north is semicircular, whereas the southern niche is cut into the wall rectangularly. Neither niche is joined with the masonry of the lateral buildings. It seems, therefore, that this doorway with the flanking niches was not part of the original construction of this passage, but rather a later addition that enclosed this area of the monastery.

The buildings on both sides of this east-west passageway are accessible from the passage. For example, the four-pillar building, described above, has a simple door without doorposts that serves as the entrance to this passageway. The large several-aisled building to the south has two traditionally shaped entrances that have slightly protruding doorposts on the exterior. The entrances are flanked on the interior with two thick lateral buttresses on both sides. These buttresses were probably important structurally for the building since it does not appear to have had any transverse walls.

The inside of this building is equipped with a regular sequence of large ceramic vessels inserted into the walls. Their bases were placed on or near floor level and are placed in such a way that their interiors are easily accessible from inside the building. Further to the south, the surviving interior walls are furnished as well with the same large ceramic vessels, although these vessels are accessible only from one side of the wall. One gets the impression that these vessels collectively functioned as substitutes for normal wall niches. Indeed, several of them are

combined with a later modification to either side of the opening to extend the available space. It is therefore possible that this building was an early monastic residence with vessels in the walls to serve as niches for personal belongings. The use of large ceramic vessels for this purpose may be understood as a simplification of the building process of a residence for monks.

CONCLUSION

The described building remains represent only a part of the ruins excavated by the members of the Egyptian Antiquities Service since 1985. We hope to be able to continue this survey in the following years, but already the exposed remains clearly demonstrate that the famous monastery of the archimandrite Shenute was far larger than the so-called White Monastery; the latter, in fact, represents only the church of the monastery, but because of this misleading label it was unfortunately often misunderstood by earlier scholars to be the monastery itself.²⁶ It appears also that the exposed buildings are not all from the same period. In various buildings beneath the actual masonry of fired bricks, earlier structures emerge for which only sun-dried mud bricks were used. We thus get the impression that with the easily understandable exception of the deep well, whose construction is mentioned also in the *vita* of Shenute (Coptic *vita*, chap. 24), practically none of the red brick buildings were contemporary with the lifetime of Shenute.

APPENDIX

Documentary Photography at the Monasteries of Anba Shinuda and Anba Bishoi, Suhag

Elizabeth S. Bolman

The monasteries of St. Shenute and St. Bishoi, colloquially called the White and Red Monasteries, present considerable opportunities for multidisciplinary studies. Collaborative research promises to contribute significantly to our understanding of monasticism in Egypt in the early Byzantine period and beyond. At each site, a monumental fifth-century church

²⁶ J. Leipoldt, *Shenute von Atripe* (Leipzig, 1903), 95 n. 6, in giving its dimensions as 3,000 m², demonstrates clearly that he understood the church as the monastery itself.

survives above ground, adjacent to at least some acres of relatively undisturbed land (Figs. 1, 5–9). Each church includes architectural sculpture, likely fifth-century in date (Figs. 10–13), as well as wall paintings from several periods (Figs. 14–18), including the fifth through the fourteenth centuries. In addition to the physical remains in this region just outside the city of Suhag, a substantial body of texts survive, written by the famous monastic leader St. Shenute of Atripe. Under the direction of Stephen Emmel, of the Westfälische Wilhelms-Universität Münster, a critical edition and translation of Shenute's corpus is being published. These two monasteries are therefore unusual in Egypt, in that substantial archaeological, art historical, architectural, and textual evidence survives, much of which dates to the early Byzantine period.²⁷

Expanding agriculture and population growth have caused significant encroachment upon some sections of land around the churches. The two churches have been recently reopened by the Coptic Church, and are in use. The impressive flourishing of Coptic monasticism and also lay pilgrimage to monastic sites further intensifies pressures on the art historical and archaeological record. Neither site is well published.

Funding from Dumbarton Oaks in the form of a Project Grant in Byzantine Studies was awarded for documentary work at both sites. It supported Grossmann's part of the study and documentation of the archaeological work recently carried out under the direction of Mohamed Abdal-Rassul of the Supreme Council of Antiquities, described above. It also made possible my work photographing the two churches.²⁸ The pace of change at these sites is currently very rapid, in sharp contrast to centuries of more or less abandonment to the dry desert climate. Tilled land, roads, and housing have now taken over what was once almost certainly valuable archaeological terrain, particularly southeast of the church of the monastery

of St. Shenute (Fig. 19). New construction of monastic guest houses and large gateways (Fig. 20), and the numerous pilgrims who come annually to the feast of St. Shenute, are only some of the more obvious factors causing the transformation of the sites.

Due to this period of transformation, it is imperative to record and where possible preserve these early Coptic remains. In addition to the fundamentally important documentary work made possible by Dumbarton Oaks, the American Research Center in Egypt has agreed to support a first period of wall painting conservation in 2003. The funding for this conservation work comes from the United States Agency for International Development. The World Monuments Watch has acknowledged both the value of the sites and their endangered state by including them in its "2002 List of One Hundred Most Endangered Sites."²⁹ An international consortium has formed to collaborate on work at the two monasteries.³⁰ Bishop Yohannes of the Coptic Church, who is in charge of both sites, has provided exceptional assistance for all of these projects. At present, work is at a very early stage, and substantial additional progress is needed in the very near future. Prints and slides taken at these two sites in 2001–2002 are available for study in the Dumbarton Oaks Byzantine Photograph and Fieldwork Archives.

²⁹ This nomination was undertaken by Elizabeth S. Bolman, and Dr. Fawzy Estafanous of the St. Mark Foundation for Coptic History.

³⁰ In 2000, a group of scholars formed the *Consortium for Research and Conservation at the Monasteries of the Sohag Region* (<http://egypt.cla.umn.edu/consortium.html>). We are collaborating in an approach that considers early monasticism as a way of life that was ideologically constructed, and also physically built. We recognize that the conceptual models of monasticism created by both late antique authors and modern scholars may not closely resemble its physical remains. Our objective is to consider texts and material evidence, using our varied disciplinary skills, to achieve results beyond what the study by any one of us, with traditional categories of evidence and methods, could obtain. The members of the consortium are: I. Scholars: Elizabeth S. Bolman (Consortium Chairperson; Temple University), Stephen Emmel (University of Münster), Gawdat Gabra (Coptic Museum, retired), Peter Grossmann (Deutsches Archäologisches Institut, Kairo, retired), Darlene Brooks Hedstrom (Wittenberg University), Karel Innemée, (University of Leiden), Bentley Layton (Yale University), Sheila McNally (University of Minnesota), Philip Sellev (University of Minnesota), Hans-Georg Severin (University of Bonn), and Thelma Thomas (University of Michigan); II. Experts: Fawzy Estafanous (St. Mark Foundation for Coptic History), Father Maximous (Monastery of St. Antony), and Hany Takla (St. Shenouda the Archimandrite Coptic Society).

²⁷ For publications of both sites, see the listings by various authors in the *Coptic Encyclopedia*, s.vv. "Dayr Anba Shinudah" and "Dayr Anba Bishoi," 3: 736–40, 761–70.

²⁸ Time constraints caused an uneven documentation. My focus at the White Monastery was on the exterior and the architectural sculpture in all parts of the church except the sanctuary. At the Red Monastery, the documentation focuses on the interior of the sanctuary.